WESTBAY WELL SUMMARY

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Location ID: <u>wb-z</u> Field Represe	entative(s): R. Cooper
Date Started: 01/24/90	Date Completed: 04/13/90
Northing: <u>221601.22</u>	Easting: 417825.10
Brass Cap: <u>4901.00</u> Outer Casing: <u>4901.4</u>	Inner Casing: 4902.63
Drilling Method: Mud & Air-Foam Rotary	Drilling Contractor: <u>Larjon Drilling Co.</u>
Driller: T. Crawford & J. Gower	
Total Depth Borehole: 382.2'	Total Depth Well Casing: 380'
Total Depth Surface Casing: 136'	
Diameter Well Casing: 1.5" (I.D.)	Diameter Surface Casing: 5"(nominal)
Water Producing (packed-off) Intervals: 239.0'	
Water Producing (packed-off) Intervals: 259.0' Water Producing (packed-off) Intervals: 264.0'	to 281.0' Shouldn't
Water Producing (packed-off) Intervals: 264.0'	to 382.2'
Water Zone(s) Detected: 136'-265' (after overnight recovery) 370'-371'	
Water Level Open Borehole: <u>216.14'(T.O.S.C.)</u> <u>04/03/90</u>	
Water Level Cased Borehole: SEE PRESSURE PROFILE DATA SHEETS	
Quik-Foam Use: unknown	
Estimated Water Use: 2,100 gallons	
Well Casing:1=2ft $2in \times 2ft$ SCD 80 PVC:1=2ft $2in \times 5ft$ SCD 80 PVC:2=10ft $2in \times 10ft$ SCD 80 PVC:34=340ftTotal SCD 80 PVC pipe:352ft	
5ft MP packer:6=30ftRegular coupling:33Pumping port coupling:3Measurement port coupling:6End cap:2Casing Clamp:0Magnetic collars:3	

Location ID: WB-2

Well Completion:

 100# bags 16/40 sand:
 bags

 100# bags 10/20 sand:
 bags

 100# bags 8/14 sand:
 bags

 100# bags 8/20 sand:
 bags

94# bags cement: bags

5 gal. buckets bentonite: buckets

50# bentonite powder: bags

Benseal: bags

Surface Casing:

94# bags cement: 2 bags

50# bags hydro-gel powder: 11 bags (for mud drilling only)

Pertinent Field Notes:

01/23/90 Start mobilization to WB-2 site. - Cooper

01/24/90 Brought water from Jornada Well. Mixed drilling mud and drilled from 0' to 120' using mud rotary with 7 7/8" bit. Examined and replaced both air filters on BE Rig; both partially saturated. - Cooper

both partially saturated. - Cooper

01/25/90 Continued drilling from 120' to 135'. Encountered limestone bedrock at 126'.

Drilled to 135' to try and find more competent rock. Install 5" x 136' steel surface

casing and blew drilling mud from borehole. - Cooper

01/26/90 Demobilized mud rotary drilling equipment from WB-2 and mobilized to WB-3. -

Cooper

02/07/90 Demobilized air-foam rotary drilling equipment from WB-1, steam cleaned, and mobilized to WB-2. Drilled from 136' to 265' using air-foam rotary with a 4"

hammer-bit. Drilled through interbedded calcareous shales and limestones. No

obvious water producing zones encountered while drilling. - Cooper

Egan

Small amounts of water (50-60 gallons) accumulated in borehole overnight. 02/08/90 Continued drilling 265'-380'. Drilled through interbedded calcareous shales and limestones. A good water producing zone encountered between 370' and 371'. Borehole TD was 380' (250' into the bedrock). 600 gallons of water was blown out of the borehole for development. Well producing 20-25 gpm during development. Mobilized drilling equipment to WB-3. - Cooper Installed 3.5" O.D. PVC sleeve to a depth of 195' below ground level. PVC could 03/12/90 not be worked past this point. Remove PVC sleeve. - Kirby Install PVC sleeve to 195' a second time for completion purposes. Sound bottom 04/13/90 of borehole at 382.2'. Installed westbay casing/couples (see casing installation log for details). Inflated all (six) packers. - Contaldo Conducted first pressure profile, attempted rising head slug test of zone #1. Rapid 04/16/90 water level equalization precluded obtaining adequate data for analysis (need to repeat test). - Contaldo Conducted rising head slug of zone #4. - Contaldo 04/18/90 Start completion above uppermost packer using silica sand and a bentonite plug. 08/14/90 Install silica sand and a bentonite plug within borehole/surface casing annulus. -Egan Grout to surface. Lockheed will finish well head (concrete pad, barrier posts, etc.) -08/29/90